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Amendment and Response Under 37 C.F.R. §1.116 - Expedited Examining Procedure

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Serial No.: 10/694,385

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For: METHODS FOR CREATING A COMPOUND LIBRARY AND IDENTIFYING LEAD CHEMICAL
TEMPLATES AND LIGANDS FOR TARGET MOLECULESAmendments to the Claims

This listing of claims replaces all prior versions, and listings, of claims in the above-identified application:

Listing of Claims

1-17. (Canceled)

18. (Currently Amended) A method of identifying a compound that binds to a target molecule, the method comprising:

selecting a library comprising test compounds, wherein each test compound has a solubility in deuterated water of at least about 1 mM at room temperature, and has a molecular weight of no greater than about 350 grams/mole;

providing a plurality of mixtures of the test compounds, each mixture being in a sample reservoir;

introducing a target molecule into each of the sample reservoirs to provide a plurality of test samples;

providing a nuclear magnetic resonance spectrometer equipped with a flow-injection probe;

transferring each test sample from the sample reservoir into the flow-injection probe;

collecting a relaxation-edited nuclear magnetic resonance spectrum on each test sample in each sample reservoir; and

comparing the spectra of each test sample to the spectra taken under the same conditions in the absence of the target molecule to identify test compounds that bind to the target molecule;

wherein the concentration of target molecule and each test compound in each sample reservoir is no greater than about 100 μ M; and